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RESULTS OF EUROPEAN CORN BORER SURVEYS IN THIRTEEN SELECTED COUNTIES, 1935

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Results of a survey to determine the degree of European corn borer infestation over a considerable portion of the infested area were reported by A. M. Vance, of the Division of Cereal and Forage Insect Investigations, in the Insect Pest Survey Bulletin vol. 15, supplement to no. 9 (October 1935).

As a part of a corn borer survey performed by men employed under Works Progress Administration funds, working under the supervision of the Japanese Beetle Control Division, surveys were made in 13 counties in Maine, Michigan, New Hampshire, New Jersey, and Vermont that were not covered by the survey organized by the Division of Cereal and Forage Insect Investigations.

In general, the W. P. A. survey was made in fields selected at random in each township of the counties covered. Twenty-five consecutive corn plants in one row near the center of each quarter of the field were examined for infestation, a total of 100 plants being examined in each field. Ten of the plants showing infestation were dissected to determine the average number of corn borers per infested plant.

Data concerning the 13 nonduplicated counties supplement that previously reported, and are tabulated for the information of interested State officials.

Townships in the respective counties surveyed are listed, together with the number of fields examined, acres surveyed, percentage of plants found infested, and the average number of corn borers per 100 plants examined. County summaries are included. There are, however, no regional averages, as these data are incomplete for continuous areas, and must be considered in conjunction with previously published results if regional averages are desired.

Data on infestation of European corn borer in the fall of 1935 in
13 selected counties.

One-generation area

MICHIGAN

Cass County

Township	Fields examined	Area surveyed	Plants infested	Average borers per 100 plants
	Number	Acres	Percent	Number
Calvin.....	5	105	0.0	0.0
Jefferson.....	5	50	.0	.0
La Grange.....	5	106	.8	1.6
Marcellus.....	5	74	4.6	4.8
Mason.....	5	58	.2	.0
Newberg.....	5	61	5.4	7.8
Volinia.....	5	64	11.8	62.2
Total	35	518	—	—
Average.....	-	-	3.3	10.9

Ottawa County

Chester.....	5	43.0	2.8	1.6
Georgetown.....	5	25.0	2.2	1.6
Jamestown	5	25.5	.4	.0
Talmadge	5	29.5	2.2	1.0
Wright	5	26.5	1.8	2.6
Total.....	25	149.5	—	—
Average.....	-	-	1.9	1.4

VERMONT

Windham County

Township	Fields examined	Area surveyed	Plants infested	Average borers per 100 plants
	Number	Acres	Percent	Number
Athens.....	5	16.0	3.2	3.0
Brattleboro.....	5	31.0	4.6	10.4
Brookline	5	25.0	3.8	2.6
Dover	5	8.5	3.6	6.0
Dummerston	5	23.0	5.4	8.6

One-generation area (Continued)

VERMONT(Continued)

Windham County (Continued)

Township	Fields examined Number	Area surveyed Acres	Plants infested Percent	Average borers per 100 plants Number
Grafton.....	5	17.0	9.8	19.7
Guilford.....	5	11.0	1.8	2.8
Halifax.....	5	8.0	3.0	6.6
Jamaica.....	5	9.0	5.8	7.2
Londonderry.....	5	16.5	.4	.4
Marlboro.....	5	16.5	3.0	2.4
Newfane.....	5	15.0	.6	.0
Putney.....	5	42.0	6.8	12.8
Rockingham.....	5	43.5	15.2	59.8
Somerset.....	1	.1	.0	.0
Stratton.....	5	3.6	2.0	2.2
Townsend.....	5	32.0	6.0	5.4
Vernon.....	5	29.5	.6	.8
Wardsboro.....	5	10.0	3.4	3.6
Westminster.....	5	22.0	8.2	19.0
Whitingham.....	5	13.0	4.0	6.5
Wilmington.....	5	9.5	2.8	3.2
Windham.....	5	8.5	3.4	2.2
Total.....	111	410.2		
Average...	-	-	4.2	8.0

MAINE

Two-generation area

Androscoggin County

Township	Fields examined Number	Area surveyed Acres	Plants infested Percent	Average borers per 100 plants Number
Auburn.....	5	17.5	0.6	0.6
Durham.....	5	7.7	.0	.0
East Livermore....	5	6.5	.0	.0
Greene.....	5	12.2	.2	.2
Leeds.....	5	12.7	.0	.0
Lewiston.....	5	13.5	.0	.0
Lisbon.....	5	12.7	.0	.0
Livermore.....	5	6.5	.0	.0
Mechanic Falls....	5	12.7	.0	.0
Minot.....	5	8.5	.0	.0

Two-generation area (Continued)

MAINE (Continued)

Androscoggin County (Continued)

Township	Fields examined Number	Area surveyed Acres	Plants infested Percent	Average borers per 100 plants Number
Poland.....	5	14.0	.0	.0
Turner.....	5	6.7	.0	.0
Wales.....	5	9.0	.0	.0
Webster.....	5	14.5	.0	.0
Total....	70	154.7		
Average..	-	-	.06	.06

Cumberland County

Baldwin.....	5	5.3	0.6	0.4
Bridgton.....	5	7.3	2.0	1.8
Brunswick.....	5	2.5	6.0	13.5
Cape Elizabeth....	5	5.5	6.8	11.0
Casco.....	5	7.0	.4	.6
Cumberland.....	5	2.6	1.8	2.4
Falmouth.....	5	2.6	6.4	14.8
Freeport.....	5	12.5	2.8	.4
Gorham.....	5	14.5	2.2	3.2
Gray.....	5	19.0	.4	.6
Harpswell.....	5	4.7	2.2	1.2
Harrison.....	5	9.2	.2	.4
Naples.....	5	6.5	.4	.4
New Gloucester....	5	10.0	.8	.6
North Yarmouth....	5	7.7	3.8	4.0
Otisfield.....	5	13.0	.0	.0
Portland.....	5	5.2	9.4	20.0
Pownal.....	5	16.0	.6	.4
Raymond.....	5	8.7	.0	.0
Scarboro.....	5	3.7	4.6	4.6
Sebago.....	5	5.0	.0	.0
South Portland....	5	.5	9.6	11.0
Standish.....	5	10.0	.6	.8
Westbrook.....	5	1.3	6.4	10.8
Windham.....	5	10.0	.4	.0
Yarmouth.....	5	2.0	6.2	12.0
Total.....	130	192.3		
Average...	-	-	2.9	4.4

Two-generation area (Continued)

NEW HAMPSHIRE

Hillsboro County

Township	Fields examined	Area surveyed	Plants infested	Average borers per 100 plants
	Number	Acres	Percent	Number
Amherst.....	5	17.5	4.8	1.4
Antrim.....	5	12.5	1.2	1.4
Bedford.....	5	12.7	6.8	14.2
Bennington.....	5	12.7	3.3	3.4
Brookline.....	5	5.5	7.4	17.6
Deering.....	5	19.5	.6	.2
Francestown.....	5	17.0	1.6	2.2
Goffstown.....	5	9.0	5.0	10.6
Greenfield.....	5	4.7	3.0	4.2
Greenville.....	5	19.0	4.8	7.2
Hancock.....	5	19.5	.8	2.2
Hillsborough.....	5	14.2	3.2	3.0
Hollis.....	5	6.0	8.2	38.2
Hudson.....	5	7.2	9.0	21.4
Litchfield.....	5	11.5	6.4	8.2
Lyndeboro.....	5	12.2	.8	1.0
Manchester.....	5	20.0	7.8	15.0
Mason.....	5	3.5	9.0	22.8
Merrimack.....	5	12.2	4.8	7.0
Milford.....	5	8.2	6.8	16.8
Mt. Vernon.....	5	2.8	6.8	16.5
Nashua.....	5	9.5	2.2	2.2
New Boston.....	5	9.7	1.8	2.8
New Ipswich.....	5	5.7	.2	.2
Pelham.....	5	14.0	8.0	18.2
Petersboro.....	5	8.2	3.0	5.2
Sharon.....	5	3.2	.0	.0
Temple.....	5	9.2	.0	.0
Weare.....	5	23.5	.8	.8
Wilton.....	5	6.0	4.8	8.5
Windsor.....	5	3.2	1.2	1.2
Total.....	155	339.6	—	—
Average...	-	-	4.0	8.2

Two-generation area (Continued)

NEW HAMPSHIRE (Continued)

Merrimack County

Township	Fields examined	Area surveyed	Plants Infested	Average borers per 100 plants
	<u>Number</u>	<u>Acres</u>	<u>Percent</u>	<u>Number</u>
Allentown.....	5	6.5	8.0	36.2
Andover.....	5	16.0	1.4	3.8
Boscawen.....	5	21.0	5.0	4.1
Bow.....	5	16.2	8.2	42.0
Bradford.....	5	5.2	3.0	5.0
Canterbury.....	5	18.5	1.2	3.8
Chichester.....	5	12.7	3.2	5.6
Concord.....	5	26.5	5.0	8.4
Danbury.....	5	10.2	.8	1.4
Dunbarton.....	5	17.2	4.1	8.8
Epsom.....	5	7.5	4.6	9.4
Franklin.....	5	8.0	2.4	3.0
Hill.....	5	16.5	12.2	12.6
Hooksett.....	5	15.0	9.0	36.5
Hopkinton.....	5	8.7	3.2	9.6
London.....	5	12.0	1.8	2.0
Newbury.....	5	9.2	2.6	5.2
New London.....	5	16.7	3.0	1.4
Northfield.....	5	6.5	2.8	4.2
Pembroke.....	5	10.7	7.2	21.0
Pittsfield.....	5	16.5	6.2	13.4
Salisbury.....	5	6.0	.6	.8
Sutton.....	5	9.2	4.4	12.5
Warner.....	5	22.0	3.6	6.5
Webster.....	5	11.0	2.3	4.3
Wilmot.....	5	11.5	4.3	10.6
Total.....	130	337.0	—	—
Average.....	-	-	4.2	10.5

Two-generation area (Continued)

NEW JERSEY

Bergen County

Township	Fields examined Number	Area surveyed Acres	Plants infested Percent	Average borers per 100 plants Number
New Milford.....	5	4.2	46.8	94.6
Riverdale.....	5	11.3	13.2	20.3
Total.....	10	15.5		
Average.....	-	-	30.0	57.4

Cape May County

Dennis.....	5	5.2	5.0	5.2
Lower.....	5	17.3	21.0	45.5
Middle.....	5	6.9	11.4	15.4
North End.....	5	6.7	6.8	6.4
Total.....	20	36.1		
Average.....	-	-	11.0	18.1

Hunterdon County

Holland.....	3	30.5	4.0	1.6
Total.....	3	30.5		
Average.....	-	-	4.0	1.6

Middlesex County

E. Brunswick.....	5	27.0	8.2	5.6
Helmetta.....	2	2.0	8.0	6.5
Madison.....	5	7.5	12.2	11.1
Monroe.....	5	18.5	11.0	12.3
N. Brunswick.....	5	10.0	.0	.0
Sayerville.....	4	3.0	6.0	4.0
Spotswood.....	4	5.5	7.0	3.7
Woodbridge.....	4	2.0	3.2	2.7
Total.....	34	75.5		
Average.....	-	-	6.9	5.7



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Two-generation area (Continued)

NEW JERSEY (Continued)

Morris County

Township	Fields examined Number	Area surveyed Acres	Plants infested Percent	Average borers per 100 plants Number
Hanover.....	5	2.5	0.0	0.0
Chatham.....	5	17.2	.0	.0
Jefferson.....	5	8.1	.2	.2
Morris.....	5	3.7	.4	1.8
Morris Plains.....	5	5.4	.2	.2
Total.....	25	36.9	—	—
Average.....	-	-	0.2	0.4

Warren County

Franklin.....	5	52.0	40.2	57.7
Frelinghuysen.....	5	41.0	2.6	1.6
Greenwich.....	5	83.0	34.4	45.2
Harmony.....	5	59.5	37.2	39.5
Independence.....	5	27.0	2.6	2.0
Lopatcong.....	5	61.0	29.0	36.8
Mansfield.....	5	41.0	6.0	4.3
Pohatcong.....	5	59.0	29.0	31.0
Washington.....	5	67.0	15.2	14.4
White.....	5	73.0	3.6	2.6
Total.....	50	563.5	—	—
Average.....	-	-	20.0	23.5